

Claims

1. A connection means for two base bodies of a fluid conducting subassembly and more particularly a modularly designed device for treating compressed air, comprising holding means provided on the mutually facing connection faces (9a and 9b) of the base bodies (3a and 3b) to be connected, and furthermore a coupling unit (7) fitting between the base bodies to be connected, said coupling unit (7) having two coupling bodies (17 and 18), said coupling bodies (17 and 18) being able to be clamped athwart the connection direction (5) of the two base bodies (3a and 3b) and thereby by virtue of inclined faces extending obliquely in relation to the connection direction (5) exerting a connection force (F_v) on the holding means, said connection force acting to provide a movement together of the base bodies (3a and 3b), characterized in that the holding means provided on each respective base body (3a and 3b) each possess at least one holding pin (16) extending toward the respectively other base body (3a and 3b), said pin fitting between the two coupling bodies (17 and 18) and simultaneously being acted upon peripherally by working faces (22 and 23) of both coupling bodies (17 and 18).

2. The connection means as set forth in claim 1, characterized in that on the connection faces (9a and 9b) of both base bodies (3a and 3b) respectively two mutually

spaced apart holding pins (16) are provided, which respectively are able to cooperate with working faces (22 and 23) of both coupling bodies (17 and 18).

3. The connection means as set forth in claim 2, characterized in that the two holding pins (16) on the associated connection face (9a and 9b) are arranged on mutually diametrically opposite sides of the opening (8a and 8b) of a fluid duct (4a and 4b) opening toward the connection face (9a and 9b).

4. The connection means as set forth in any one of the claims 1 through 3, characterized in that the holding pins (16) are placed within periphery of the associated connection face (9a and 9b) in contact with the coupling unit (7), such holding pins being located preferably near the edge of the respective connection face (9a and 9b).

5. The connection means as set forth in any one of the claims 1 through 4, characterized in that the holding pins (16) are in the form of components separate from the associated base body (3a and 3b), which components are attached to the respective base body (3a and 3b) more particularly in a detachable manner.

6. The connection means as set forth in claim 5, characterized in that the holding pins (16) are screwed to the associated base body (3a and 3b).

7. The connection means as set forth in any one of the claims 1 through 6, characterized in that the holding pins (16) on the base bodies (3a and 3b) to be connected together are coaxially opposite to one another in pairs.

8. The connection means as set forth in any one of the claim 1 through 7, characterized in that for the mutual clamping together of the two coupling bodies (17 and 18) clamping means (25) engaging same are provided which are preferably in the form of clamping means (25) designed in the form of screw connection means.

9. The connection means as set forth in claim 8 in conjunction with claim 7, characterized in that the clamping means (25) are provided with clamping screws (38) one respective clamping screw fitting through an intermediate space (37) present between two holding pins (16) associated with each other in a pair.

10. The connection means as set forth in any one of the claims 1 through 9, characterized in that both the working faces (22 and 23) of the coupling bodies (17 and 18) and also the mating working faces (24) cooperating with the same, of the holding pins (16) are designed in the form of oblique faces.

11. The connection means as set forth in claim 10, characterized in that, as related to the connection direction (5) of the two base bodies (3a and 3b), the working faces (22 and 23), have the same angles (w) of inclination as the mating working faces (24).

12. The connection means as set forth in any one of the claims 1 through 11, characterized in that the mating working faces (22 and 23,) cooperating with the working faces (22 and 23), of the holding pins (16) have a conical form.

13. The connection means as set forth in any one of

the claims 1 through 11, characterized in that the mating working faces (22 and 23,) cooperating with the working faces (22 and 23), of the holding pins (16) are provided on a surrounding radial projection (31), which preferably is formed by a head portion (33) of the respective holding pin (16).

14. The connection means as set forth in any one of the claims 1 through 13, characterized in that each holding pin (16) possesses a mating working face (24) facing the connection face (9a and 9b) of the base body (3a and 3b) bearing it and cooperating with the associated working faces (22 and 23) of the coupling bodies (17 and 18), the coupling bodies (17 and 18) fitting, in the clamped together condition thereof, between a respective mating working face (24) and the associated connection face (9a and 9b) and acting on both the mating working face (24) and the connection face (9a and 9b).

15. The connection means as set forth in any one of the claims 1 through 14, characterized in that the coupling bodies (17 and 18) fit round the holding pins (16) like clips in the clamped together state, each coupling body (17 and 18) possessing, for each holding pin (16), a recess partly receiving it.

16. The connection means as set forth in any one of the claim 1 through 15, characterized in that the coupling bodies (17 and 18) engage each other in the direction of the biasing force when in the clamped together state.

17. The connection means as set forth in any one of the claims 1 through 16, characterized in that the coupling unit (7) has a through duct (13) flush with the

duct openings (8a and 8b) provided on the connection faces (9a and 9b) in the fitted state, such through duct being completely formed in one of the two coupling bodies.

18. The connection means as set forth in claim 17, characterized in that the through duct (13) provided on the one coupling body (18) is delimited, on the side facing the other body (17), by a wall bulging out toward the other coupling body (17), such wall fitting into a complementary recess in the other coupling body (17).

19. The connection means as set forth in claim 17 or in claim 18, characterized in that an annular seal (15) is fitted between the coupling body (18) having the opening and the two base bodies (3a and 3b) to be connected, said seal being coaxial in relation to the through duct (13).